

USDA Herbaceous Wind Barriers

Conservation Practice Job Sheet

422A

Natural Resources Conservation Service (NRCS)

April 1997

Landowner



Definition

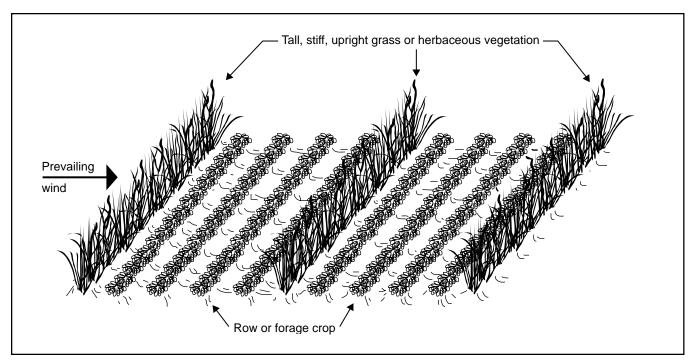
Herbaceous wind barriers are tall grass and other nonwoody plants established in 1- to 2-row narrow strips spaced across the field perpendicular to the normal wind direction.

Purpose

Herbaceous wind barriers reduce wind velocity across the field and intercept wind-borne soil particles.

Secondary benefits

- Protect crops from damage by the wind or windblown soil particles.
- · Provide food and cover for wildlife.
- Trap and distribute snow across the field.
- Reduce pesticide drift and the movement of other contaminants.



Herbaceous wind barriers reduce wind velocity, which prevents wind erosion, protects crop plants, and influences the deposition of sediment, snow, and other wind-borne material. For optimum effect on wind, the barriers should not be farther apart than 10 to 12 times the height of the barrier vegetation.

Where used

- On cropland and other land where wind-associated problems occur.
- Where snow management is desirable for improved moisture conservation.
- Where wildlife food, cover, and corridors are part of the landowner's desired objectives.
- On irrigated land using center pivot irrigation where taller, woody species would interfere with the pivot system.

Conservation management system

Herbaceous wind barriers are normally established as part of a conservation management system to address the soil, water, air, plant, and animal resources and the owner's objectives. When agronomic and horticultural crops are grown, it is important to plan the conservation crop rotation, nutrient and pest management, crop residue management, and other cropland practices.

Wildlife

Connecting herbaceous wind barriers with existing perennial vegetation, such as woodlots and woody draws (tree/shrub establishment) or hedgerows (windbreak/shelterbelt establishment), benefits wildlife and aesthetics. Adapted native species that provide wildlife food and cover should be planted.

Specifications

Site-specific requirements are listed on the specifications sheet. Additional provisions are entered on the job sketch sheet. Specifications are prepared in accordance with the NRCS Field Office Technical Guide. See practice standard Herbaceous Wind Barrier (442A).